

1. An appar

1. An apparatus comprising:
  - a UI view definition for a user interface; and
  - a UI view manager operable to dynamically generate the user interface from the UI view definition, wherein the UI view manager instantiates a wrapped control as part of the user interface.
2. The apparatus of claim 1 wherein the wrapped control comprises:
  - a control; and
  - a wrapper;and the UI view manager instantiates the wrapped control by providing the control as part of the user interface using the wrapper.
3. The apparatus of claim 1 wherein the user interface comprises a plurality of controls, the wrapped control being one of the controls.
4. The apparatus of claim 1 wherein the UI view manager is operable to dynamically add a new wrapped control to the user interface.
5. The apparatus of claim 1 wherein the user interface includes a plurality of controls; and the UI view manager is operable to dynamically remove an existing control of the controls from the user interface.
6. The apparatus of claim 1 wherein the UI view manager is operable to dynamically change a function of the wrapped control.
7. The apparatus of claim 1 further comprising:
  - a UI container, wherein

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the UI view definition comprises a control definition for the wrapped control,  
 wherein the control definition specifies a user interface element of the  
 wrapped control and a program identifier of code to provide  
 functionality of the wrapped control.

16. The apparatus of claim 1 wherein  
 the UI view definition comprises a panel definition for a panel of the user  
 interface.

17. The apparatus of claim 16 wherein  
 the panel definition comprises a control definition for a control to be presented  
 in the panel, wherein the control definition specifies a user interface  
 element of the control and a program identifier of code to provide  
 functionality of the control.

18. A method for providing a user interface comprising:  
 generating a user interface from a UI view definition and dynamically editing  
 the user interface,  
 wherein  
 the generating includes creating a wrapper for generating a wrapped  
 control as part of the user interface.

19. The method of claim 18 further comprising:  
 dynamically adding a new wrapped control to the user interface.

20. The method of claim 18 further comprising:  
 dynamically changing a function of the wrapped control.

21. The method of claim 18 further comprising:  
 dynamically removing an existing wrapped control from the user interface.

22. The method of claim 18 further comprising:  
 sending a message to the wrapped control via a control interface associated  
 with the wrapper.

23. The method of claim 18 further comprising:

receiving a message from the wrapped control via a UI view interface  
associated with a UI view manager.

24. The method of claim 18 wherein creating a wrapper comprises:  
implementing at least one function of a control interface.

25. The method of claim 24 wherein the at least one function is selected  
from the set a first function to cause the control to read its internal data, a second  
function to cause the control to load a property of the control from the UI view  
definition, a third function to save a property of the control to the UI view definition,  
a fourth function to return a license key for the control, a fifth function to initialize a  
property of the control, and a sixth function to receive a notification about a user  
interface event.

26. The method of claim 18 further comprising:  
generating a UI view manager by implementing at least one function of an IUI  
view interface the function selected from the set a first function  
returning a table of references to business objects, a second function  
returning a parameter to provide scope of access to a control of the  
user interface, a third function to register a control for providing alarm  
information to the control, a fourth function to deregister a control to  
terminate providing alarm information to the control, a fifth function to  
create a user interface panel for housing controls, a sixth function to  
create a user interface panel for adding a control to a user interface  
panel, a seventh function to remove a panel from the user interface, an  
eight function to remove a control from a user interface panel, a ninth  
function to activate or deactivate a control, a tenth function to display a  
text message of a control on a status message panel.

27. A computer system comprising:  
a processor;  
a display screen, coupled to said processor;  
computer readable medium coupled to said processor; and  
computer code, encoded in said computer readable medium,

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9 using instructions.

1 34. The computer program product of claim 33 further comprising:  
 2 adding instructions to dynamically add a new wrapped control to the user  
 3 interface;  
 4 and wherein  
 5 the computer-readable medium further stores the adding instructions.

1 35. The computer program product of claim 33 further comprising:  
 2 changing instructions to dynamically change a function of the wrapped  
 3 control;  
 4 and wherein  
 5 the computer-readable medium further stores the changing instructions.

1 36. The computer program product of claim 33 further comprising:  
 2 removing instructions to dynamically remove an existing wrapped control  
 3 from the user interface;  
 4 and wherein  
 5 the computer-readable medium further stores the removing instructions.

1 37. The computer program product of claim 33 further comprising:  
 2 sending instructions to send a message to the wrapped control via a control  
 3 interface associated with the wrapper;  
 4 and wherein  
 5 the computer-readable medium further stores the sending instructions.

1 38. The computer program product of claim 33 further comprising:  
 2 receiving instructions to receive a message from the wrapped control via a UI  
 3 view interface associated with a UI view manager;  
 4 and wherein  
 5 the computer-readable medium further stores the receiving instructions.

1 39. An apparatus comprising:  
 2 generating means for dynamically generating a user interface from a UI view  
 3 definition,

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wherein  
the generating means includes using means for using a wrapper for generating  
a wrapped control as part of the user interface.

40. The apparatus of claim 39 further comprising:  
adding means for dynamically adding a new wrapped control to the user  
interface.

41. The apparatus of claim 39 further comprising:  
changing means for dynamically changing a function of the wrapped control.

42. The apparatus of claim 39 further comprising:  
removing means for dynamically removing an existing wrapped control from  
the user interface.

43. The apparatus of claim 39 further comprising:  
sending means for sending a message to the wrapped control via a control  
interface associated with the wrapper.

44. The apparatus of claim 39 further comprising:  
receiving means for receiving a message from the wrapped control via a UI  
view interface associated with a UI view manager.

45. A system comprising:  
a wrapped control; and  
a UI view manager, wherein  
the UI view manager dynamically provides the wrapped control as part  
of a user interface.

46. A system comprising:  
a wrapped control comprising:  
a control; and  
a wrapper around the control;  
and  
a UI view manager, wherein

the UI view manager uses the wrapper to dynamically provide the control as part of a user interface.

47. A signal embodied in a carrier wave comprising:  
generating instructions to dynamically generate a user interface from a UI view definition, wherein  
the generating instructions include using instructions for using a wrapper to generate a wrapped control as part of the user interface.

48. A signal embodied in a carrier wave comprising:  
a user interface 100 produced by generating instructions to dynamically generate the user interface from a UI view definition, wherein  
the generating instructions include using instructions for using a wrapper to generate a wrapped control as part of the user interface.